

# NATURAL PYRAMIDS OF ANCIENT EGYPT: FROM EMULATIONS OF MONARCHS TO ROYAL BURIALS

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*Abstract: Scholars observed that pyramid shape hills or rocks (so called 'natural pyramids') in some cases are related to tombs, and some attention was paid to this phenomenon in the past, but focusing only on individual cases. So far, the subject was never studied in a broader context. The aim of this paper is to explore and examine such landmarks in ancient Egypt in order to understand, how this idea developed, and how such structures were interpreted and utilised. Several archaeological sites where such structures are attested were visited and analysed in the context of funerary landscapes (the research included spatial, chronological and textual researches). As a result, it is clear that such mountains and rocks were conceptualised as pyramids. Some of them were seen as structures meaningful on their own, i.e. they were not substitutes for man-made pyramids. These form an previously overlooked aspect of Egyptian funerary landscapes showing how ancient Egyptians projected their beliefs on the landscape and how they used the landscape to evoke status and religious symbols.*

**Key words:** Religion, Funerary landscape, Pyramids, Tombs.

Elements of a landscape can create associations in the human mind with objects from different spheres of experience, e.g. certain natural features of landscape can evoke forms known from architecture or religion. Undoubtedly, ancient Egyptians were sometimes conceptualising elements of landscapes based on their resemblance to already

known shapes resembling, e.g. deities.<sup>2</sup> The best example of this practice is Jebel Barkal. The mountain's unusual appearance made it the focal point of religious cult and object of intense theological speculation.<sup>3</sup>

In different cultures the relation between burials, landscape and funerary activity can be observed.<sup>4</sup> This phenomenon is poorly explored in the context of ancient Egypt. Mountains resembling pyramids which are located along the Nile form an important subject of study.

The term "natural pyramid" is applied to natural formations which resemble man-made pyramids.<sup>5</sup> The so-called "natural pyramid" can be defined as a natural formation, which takes on a pyramidal shape from at least one perspective and was related with burial practices or funerary beliefs. Despite the vast interest in the subject of pyramids in general, this aspect of the topic is under-researched.<sup>6</sup> Recognition by ancient Egyptians of some features of a landscape as natural pyramids is controversial speculation, e.g. the question, was the el-Qurn mountain in Thebes conceptualised by ancient Egyptians as a pyramid?<sup>7</sup> Because nobody before has researched this subject<sup>8</sup> in general and evaluated the significance of such conceptualisations, it is a very problematic issue which requires further studies to better understand burial customs in ancient Egypt.

In ancient Egypt, man-made pyramids played a crucial role in the royal funerary complexes and were strictly associated with kings and mothers of monarchs until the 18<sup>th</sup> Dynasty.<sup>9</sup>

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<sup>2</sup> See e.g. DONOHUE 1992 and WEGNER 2007.

<sup>3</sup> KENDALL and EL-HASSAN AHMED MOHAMED 2016, 4–5.

<sup>4</sup> E.g. VAVOURANAKIS 2007, 65–67; WEGNER 2007.

<sup>5</sup> E.g. the "pyramid" in Bosnia although its interpretation is very controversial (BOHANNON 2006).

<sup>6</sup> Not mentioned in e.g. LEHNER 1997 or VERNER 2004. According to FAROUK EL-BAZ (2001), the idea for constructing pyramids comes from the knowledge of the endurance of conical shape rock formations in the Sahara.

His paper is the closest to the topic of the natural pyramids but does not deal with the subject of using such structures by ancient Egyptians as burial places. Although, according to its author, the shape of pyramids was inspired by the enduring nature of the natural features. I do not agree with Farouk el-Baz. There is no reason for such an assumption.

<sup>7</sup> See discussion in ČWIEK in press.

<sup>8</sup> With the exception of research on separate rock formations resembling pyramids (see ČWIEK in press; WEGNER 2009).

<sup>9</sup> JÁNOSI 1992, 53–54.

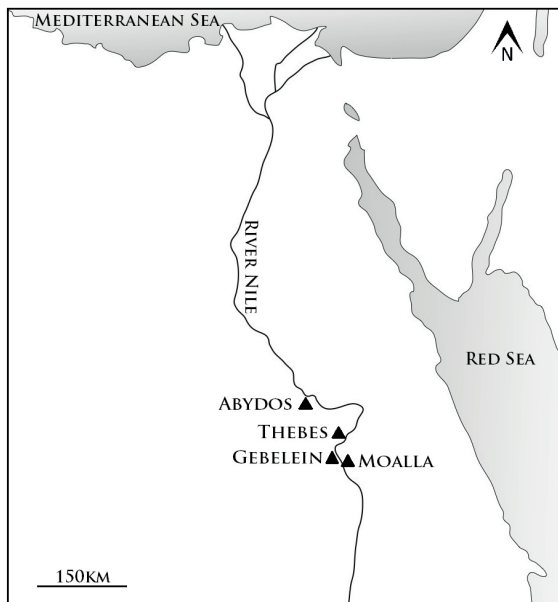


Fig. 1 Locations of the natural pyramids in Egypt.

Natural pyramids have been mentioned in publications in the central part of Upper Egypt (Fig. 1). The analysis of such structures presented here demonstrates their important role in the conceptualisations of landscapes in ancient Egypt and sheds a light on an overlooked aspect of the burial practices along the Nile.<sup>10</sup> Studies on the possible meanings of such formations and how they were seen by the ancient Egyptians are difficult since they were not mentioned in preserved texts (with one exception (see below)) and their significance could have been different in various periods.

Five natural pyramids already recognised by different scholars will be presented below (in geographical order from south to north) and analysed in context of the landscape as well as of archaeological and written sources. The author of this paper visited them, but was not able to take a look at the natural pyramid at Abydos from the perspective of Senwosret III's temple.<sup>11</sup>

In other cases, the main observation points were in front of the tombs related with the natural pyramids, and it was noticed that the pyramidal shape was most clear from such a perspective. However, in the case of el-Qurn, there are many

places from which one can easily recognise the pyramidal shape of the mountain.

An analysis from the perspective of the landscape archaeology approach offers glimpses into the potential symbolic meaning of these natural features. A landscape can be subjected to interpretation by its ancient dwellers and modern researchers.<sup>12</sup> This may be a subject of phenomenological studies, i.e. descriptions and understanding how past societies were experiencing a landscape in which they were placed.<sup>13</sup> Cemeteries in ancient Egypt were places of social display among different classes of the society,<sup>14</sup> thus the landscape could have become the medium for the manifestation<sup>15</sup> of the social order and beliefs.

A landscape can be structured by monuments which directs attention to the focal point(s) and helps to interpret them.<sup>16</sup> The spatial arrangement of the man-made structures in relation to natural features include examples from the Moalla, Gebelein, and Abydos necropoleis where they draw the viewer's attention to the natural pyramids.

The approach towards funerary landscapes presented by Tibor-Tamás Daróczy<sup>17</sup> is very useful and helps to understand this phenomenon. As he wrote, "The funerary landscape is the reconstruction in motion of how it could have been from a single vantage point that focuses on the phenomenological relation between death, disposal of the body in the environment and the social memory of the group participating in the remembrance of the burial. [...] The goal of such a funerary landscape [analysis] is to attempt to represent the most likely ways in which humans might have experienced the funerary aspect of their space."<sup>18</sup> Thus, certain feelings or impressions were evoked by elements of a landscape.

The aim of this paper is to explore the phenomenon of natural pyramids in ancient Egypt, in particular: how this idea developed, and how such structures were interpreted and utilised.

### Moalla – Tomb of Ambitious Dignitary

The Moalla necropolis is located approximately 45 km south-west of Thebes. It was related to the

<sup>10</sup> The subject is broader. Therefore, the discussion here will be limited to the landscape with little attention paid to religious matters. Political and economic aspects of the subject will not be examined in the present paper.

<sup>11</sup> The author would like to thank Josef Wegner for the image of the mountain from that perspective, which is published here as Fig. 5.

<sup>12</sup> INGOLD 1993, 153.

<sup>13</sup> TILLEY 1994, 12.

<sup>14</sup> RICHARDS 1999, 90.

<sup>15</sup> TILLEY 1994, 10.

<sup>16</sup> TILLEY 1994, 204–207.

<sup>17</sup> DARÓCZI 2012.

<sup>18</sup> DARÓCZI 2012, 200.



Fig. 2 Natural pyramid at Moalla viewed from the south-west (top) and west (bottom, its southern (on the right) part was partly destroyed by stone extraction in modern times).

town of Hefat and possibly to the nearby Hut-Snefru as well.<sup>19</sup> It is here that a cemetery was discovered containing several burials belonging to the provincial governors and officials of the late Old Kingdom and First Intermediate Period.<sup>20</sup>

The standalone mound that incorporates the tomb of Ankhtifi, his supposed son Sobekhotep,<sup>21</sup>

and others,<sup>22</sup> provides a focal point for the local landscape at Moalla (Fig. 2). The decorated tomb of Ankhtifi is by far the biggest at the cemetery and is famous for its owner's self-presentation text, which is preserved on the walls of his tomb.<sup>23</sup> It gives us a glimpse into the regional history and how this local dignitary gained control over a

<sup>19</sup> MANASSA 2003, 3.

<sup>20</sup> VANDIER 1950; EL-MASRY 2008.

<sup>21</sup> VANDIER 1950.

<sup>22</sup> EL-MASRY 2008.

<sup>23</sup> VANDIER 1950 and LICHTHEIM 1973, 85–86.

large part of southern Egypt, in effect becoming a sovereign ruler in all but name. As an overseer of the third Upper Egyptian nome, he conquered the second nome with his private army, extended his power to the first district and was trying to expand to the north as well. His ambitions to appear as an independent ruler of southern Egypt are clear. As he stated in his self-presentation: *Horus brought me to the nome of Edfu for life, prosperity, health, to re-establish it and I did (it) ... I am the vanguard of men and the rearguard of men.... A leader of the land though the active conduct ... I am a champion without peer.*<sup>24</sup> Undoubtedly, he also wanted to express this in the form of his burial.

The tomb of Ankhtifi was cut into the slope of a rocky hill that is separated from surrounding cliffs. Most probably, it was chosen due to its pyramidal shape (despite the bad quality of the rock),<sup>25</sup> giving the nomarch a royal-like status in the landscape and a preeminent place in the necropolis.<sup>26</sup> The archaeological mission at Moalla directed by Mark Collier has discovered previously unknown elements of this burial complex. The original façade of the tomb had been carved out of the rock. In front of the tomb, plastered mud-brick obelisks were constructed.<sup>27</sup> The whole complex once included a courtyard, a causeway and what seems to be the remnants of a valley temple,<sup>28</sup> thus emulating Old Kingdom royal pyramid complexes. Also, other dignitaries used this natural pyramid as their final resting place, but their burial complexes are modest<sup>29</sup> and as far as it is known (a research in front of them is needed) do not structure the landscape feature in the way that Ankhtifi did.<sup>30</sup>

Ankhtifi was a governor who nominally held power on behalf of the Heracleopolitan Dynasty,<sup>31</sup> with no right to a burial in a pyramid.<sup>32</sup> However, his ambition to be identified with royalty was expressed in his mortuary complex. He did not

violate the protocol by constructing a pyramid, but made a strong point by arranging his burial complex to make it look like a royal one.

### Silent Pyramids at Gebelein

The archaeological sites at Gebelein are located on the west bank of the Nile, 6 km north-west of Moalla, which is visible across the river. The area was an important Old Kingdom and First Intermediate Period burial place of the provincial elite.<sup>33</sup>

There is a necropolis located on the south-eastern foothill and slopes of the western hill of Gebelein.<sup>34</sup> The focal point of that cemetery are two natural spurs (Fig. 3) which were recognised as natural pyramids by Giovanni Bergamini.<sup>35</sup> When one looks at them from the eastern and north-eastern sides, their pyramidal shape is clear.

At the foot of the southern spur two *saff*-tombs<sup>36</sup> have been discovered. Pottery found in the northern (partly excavated) tomb is dated to the 11<sup>th</sup>–12<sup>th</sup> Dynasty. The burial chamber of the northern *saff*-tomb was hewn into the natural pyramid<sup>37</sup> and the crypt of the southern one is unknown. The northern structure lies on the axis of the eastern face of the spur. The plans of both tombs have been determined thanks to a compilation of excavation and geophysical prospection results.<sup>38</sup> Both structures are very similar in shape and are surrounded by burials of rather simple form. Several niches were cut into the southern side of the southern natural pyramid. No traces of such activities were found on its northern face. This might be due to the inclination of the terrain, which does not provide an opportunity to cut into the rock of the northern side compared to the southern side.

Directly north of the aforementioned spur another smaller natural pyramid is located. The

<sup>24</sup> LICHTHEIM 1973, 85–86.

<sup>25</sup> The hill was used as a quarry and this activity led to the discovery of the tomb (VANDIER 1950, 2).

Nevertheless, this activity did not impact the shape of the mound. The extraction area can be seen in the southwest slope and it is affecting the symmetry of the hill.

<sup>26</sup> COLLIER *et al.* 2004, 26–27.

<sup>27</sup> COLLIER *et al.* 2004, 30.

<sup>28</sup> DODSON and IKRAM 2009, 186.

<sup>29</sup> See EL-MASRY 2008.

<sup>30</sup> It is worth mentioning that some of the tombs in middle Egypt had approaches resembling these pyramid complexes (JEFFREYS 2010, 109–110).

<sup>31</sup> WILLEMS 2010, 84.

<sup>32</sup> Only kings and usually mothers of kings were buried in pyramids, see JÁNOSI 1992, 53–56. It was suggested that Ankhtifi may have been a descendant of a king, but there is no proof for this (VANDIER 1950, 13–15; PAPAŽIAN 2015, 422).

<sup>33</sup> EJSMOND 2016, 9–11.

<sup>34</sup> EJSMOND 2016, 16–17.

<sup>35</sup> BERGAMINI 2005, 34–36.

<sup>36</sup> For the definition of a *saff*-tomb see ARNOLD 2003, 206.

<sup>37</sup> BERGAMINI 2005, 34–35.

<sup>38</sup> BERGAMINI 2005, 34–35; EJSMOND *et al.* 2015; ORDUTOWSKI 2016, Fig. 2.

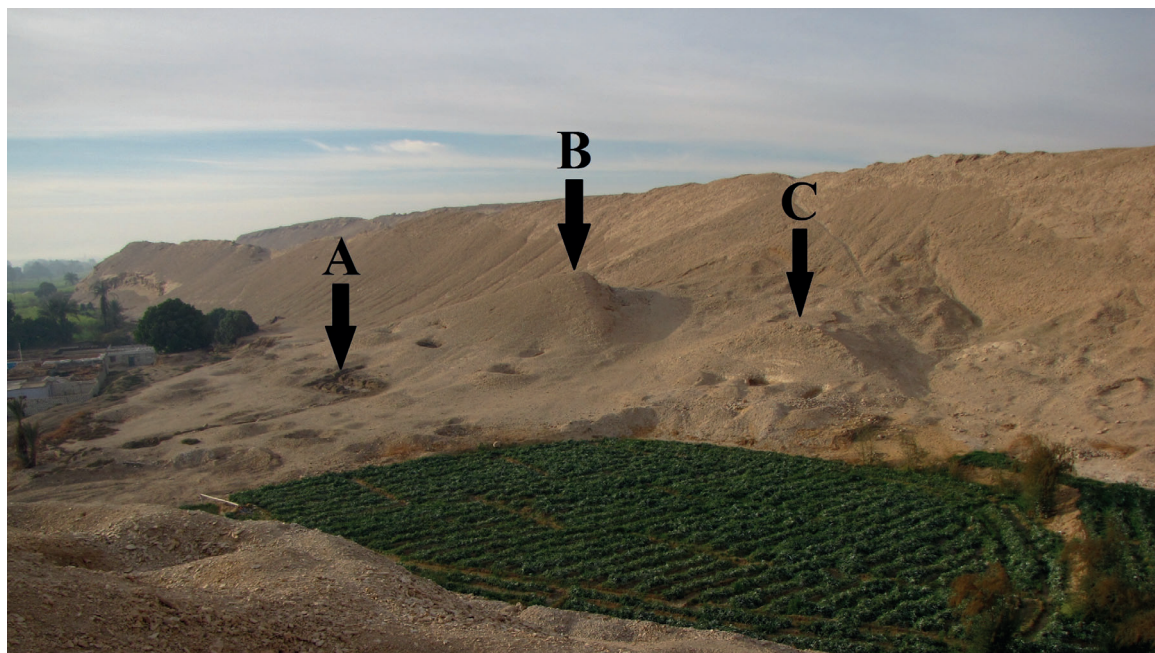


Fig. 3 Natural pyramids at Gebelein viewed from the northeast (A – northern *saff*-tomb, B and C – natural pyramids).

structures that might have been located east of it were destroyed by an expansion of the agricultural field. Two shafts are still visible on the lower part of its eastern face and they are similar to those cut into the southern natural pyramid. It is possible that one or two *saff*-tombs had been located at the eastern foot of this spur.

An examination of the archival images of the area made in the 1920s and 1930s that are kept in the City's Archive in Turin, shows that the spurs did not change their shapes since then. Prehistoric petroglyphs that are located south of the southern natural pyramid<sup>39</sup> indicates that the rock formation in the area is solid, thus it seems that the shape of the rocks did not change much since the First Intermediate Period.

An interpretation of the natural pyramids at Gebelein is very difficult due to the lack of sufficient publications from most of the previous explorations of the cemetery, and since a large part of the necropolis has already been destroyed.<sup>40</sup> Furthermore, less than a quarter of one *saff*-tomb has been excavated.<sup>41</sup> Moreover, there are no inscriptions which might inform us about the owners of

the sepulchres. The dating of the pottery found in the partly excavated tomb is very general (11<sup>th</sup>–12<sup>th</sup> Dynasty),<sup>42</sup> and it is possible that the burial might be slightly older than the pottery, because the artefacts may be related with the mortuary cult and therefore reflect human activities after the initial burial. Therefore, this construction should be interpreted in the context of the First Intermediate Period and early Middle Kingdom. Two interpretations of its meaning can be proposed, depending on whether the construction was made after the 11th Dynasty took control over Gebelein (1) or before this event (2):

1) Mentuhotep II erected a chapel dedicated to Hathor, Lady of Dendera, at Gebelein.<sup>43</sup> Priests of the local temple were probably buried at the nearby necropolis in question, since it is located c. 500 m east from the precinct. At that time, *saff*-tombs belonged to royalty and very important dignitaries.<sup>44</sup> The rulers of the 11<sup>th</sup> Dynasty appears to have been avoiding creation of nomarchs and all the administration was directly governed by the palace.<sup>45</sup> Therefore, the *saff*-tombs at Gebelein as well as their asso-

<sup>39</sup> EJSMOND *et al.* 2017, 260.

<sup>40</sup> EJSMOND *et al.* 2017, 254–7.

<sup>41</sup> BERGAMINI 2005, 34–35.

<sup>42</sup> BERGAMINI 2005, 34–35.

<sup>43</sup> FIORE MAROCHETTI 2010, 23–26.

<sup>44</sup> ARNOLD 2003, 206.

<sup>45</sup> WILLEMS 2010, 84.

ciation with the natural pyramid could have been underlining the very high social status (possibly comparable to that of a nomarch) of the deceased, maybe even a connection to the royal family existed.

- 2) If the tombs were constructed before the rulers of the 11<sup>th</sup> Dynasty gained control over Gebelein, the use of the spurs as a pyramid should be interpreted as an expression of the kingly ambitions of their owners, who may have been important dignitaries in the region, like Ankhthifi.

### Pyramid of Thebes

Thebes was one of the most significant places in ancient Egypt and the amount of data concerning this area is plentiful. Layers of meanings accumulated on the local landscape, of which only a fraction can be detected today. A cultural landscape can be dynamic in a sense that it is constantly encultured, interpreted and re-interpreted.<sup>46</sup> The focal point of the local landscape are the Theban cliffs (Fig. 4). El-Qurn is the highest peak of that formation and is surrounded by places of great significance: most noticeably the mortuary temples at Deir el-Bahari, and the Valley of the Kings.<sup>47</sup> Its form probably did not change much during the last few thousand years<sup>48</sup> and no traces of manipulation of its shape were found.

As Christopher Tilley wrote, “Without a name culturally significant places would not exist, but only as a raw void, a natural environment.”<sup>49</sup> Another, magnifying significance of a place addition would be relating a place with a divinity or making it personified by a god. Ancient Egyptians referred to el-Qurn as *ta dhnt* – “The Peak”.<sup>50</sup> It was associated with Hathor as the goddess of the Theban necropolis, who was personified as Meretseger (“She Who Loves Silence”), since at least the Middle Kingdom period.<sup>51</sup> Egyptologists have debated over its symbolic value.<sup>52</sup> The mountain was referred to as “a natural pyramid” and it was thought that the recognition of this phenomenon

by the ancient Egyptians was one of the reasons why the New Kingdom royal burials were located in the Valley of the Kings from which the peak’s pyramidal shape is the most clearly recognisable.<sup>53</sup>

The religious significance of the hills of the Theban necropolis could have started in the Middle Kingdom, with the relation of el-Qurn with Meretseger.<sup>54</sup> It should be noted that Mentuhotep II already had his tomb complex partly hewn into the Theban cliffs. This complex can be regarded as a transition between the Old Kingdom pyramid temple and the New Kingdom House of Millions of Years. The entrance to his burial chamber was deliberately hidden in the courtyard of the superstructure,<sup>55</sup> which has a parallel in Senwosret III’s funerary complex at Abydos (see below).

During the Second Intermediate Period, the 17<sup>th</sup> Theban Dynasty emerged in Thebes and was responsible for the second reunification of Egypt. These rulers constructed small pyramids at Dra Abu el-Naga.<sup>56</sup> According to Daniel Polz, they were making ideological connections between themselves and previous rulers buried at Thebes by choosing such locations (between the earlier royal necropoleis of et-Tarif and Deir el-Bahari) and the construction of a pyramid above a royal interment (previous kings buried at Deir el-Bahari and et-Tarif were probably constructing pyramids on top of their sepulchres).<sup>57</sup> The 18<sup>th</sup> Dynasty abandoned the construction of royal pyramids as part of a royal burial complex. Since the reign of Thutmose I or Hatshepsut, royal interments were located in the Valley of the Kings,<sup>58</sup> from which el-Qurn resembles a pyramid most.<sup>59</sup>

It might be thought that for some reason the rulers lost their interest in constructing pyramids. When one analyses their tombs and mortuary temples in the context of the local landscape, it is more likely that they ascribed the meaning of a pyramid to the natural formation. This transfer of meaning could have been facilitated by two aspects: 1) At the foot of el-Qurn earlier kings constructed their mortuary temples as well as pyramids, so it was already related with royal funerary activities and

<sup>46</sup> TILLEY 1994, 67.

<sup>47</sup> DONOHUE 1992, 871.

<sup>48</sup> The conical rock shape is very enduring FAROUK EL-BAZ (2001).

<sup>49</sup> TILLEY 1994: 18.

<sup>50</sup> OTTO 1975.

<sup>51</sup> OTTO 1975; VALBELLE 1982; DONOHUE 1992, 871; RICHARDS 1999; LEHNER 2000, 188–189; JEFREYS 2010: 106.

<sup>52</sup> See references in VALBELLE 1982.

<sup>53</sup> WEEKS 2001, 1013; REEVES and WILKINSON 2005, 17.

<sup>54</sup> E.g. see POLZ 2008, 530–531; VALBELLE 1982.

<sup>55</sup> see e.g.: ARNOLD 1979

<sup>56</sup> POLZ 2010.

<sup>57</sup> POLZ 2010, 346–352; see also ARNOLD 1979.

<sup>58</sup> ĆWIEK 2014, 69.

<sup>59</sup> DODSON and IKRAM 2008, 209–210, 223–226.

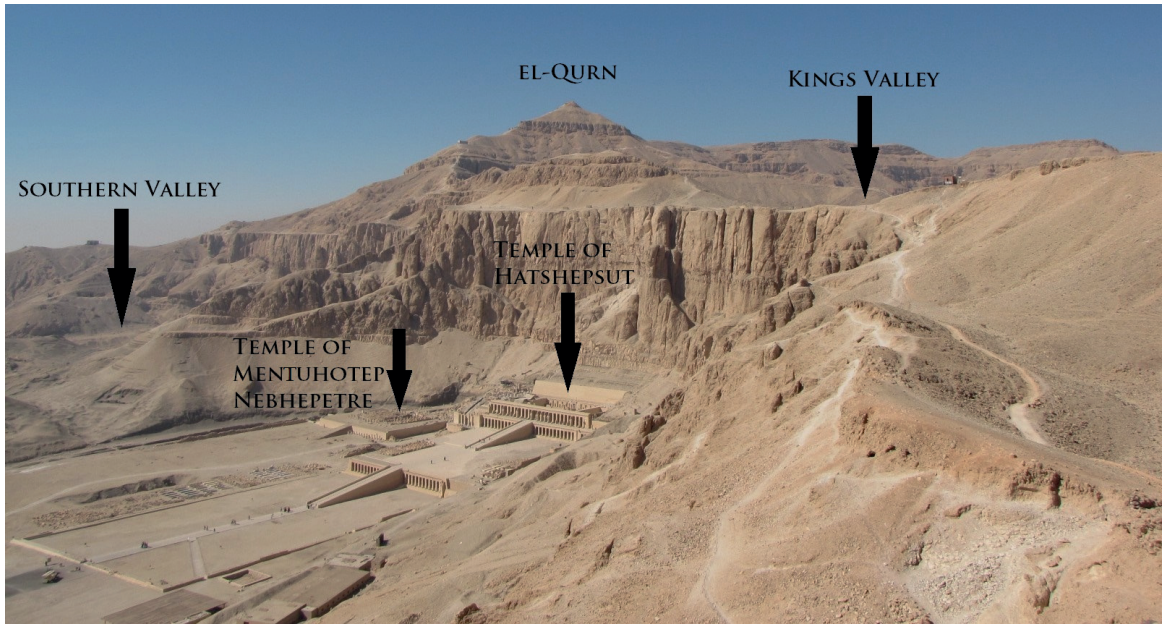



Fig. 4 View of el-Qurn from the northeast.

transference could occur by means of spatial relations. 2) The shape of a pyramid is thought to represent the primordial mound from which the world was created.<sup>60</sup> Therefore, the primordial mound could have been symbolised by a pyramid as well as a mountain or rock. Man-made pyramids and natural features resembling them can function as symbolic representations of the primordial mound and this leads to the thought that certain mountains could evoke the primordial mound but not necessarily a pyramid. Nevertheless, the interment of a king's mummy in such a symbolic primordial mound was making it formally a pyramid.

According to Andrzej Ćwiek, the resemblance of el-Qurn to man-made pyramids was so convincing for the ancient Egyptians that they recognised this natural feature as a pyramid in its own right.<sup>61</sup> The evidence is in a partly preserved text in Hatshepsut's temple at Deir el-Bahari, which contains a word (*wdr*) which may be translated as a "cliff" or "slope".<sup>62</sup> An important feature of its orthography is a five-stepped pyramid sign as a classifier – . According to A. Ćwiek, "it seems that it may directly refer to the idea of the western mountain as a pyramid".<sup>63</sup>

Therefore, mortuary temples became separated from tombs and were located on the eastern side of the Theban cliffs, starting with Amenhotep I and continued by Hatshepsut's constructions at Deir el-Bahari.<sup>64</sup> According to Andrzej Ćwiek, the mountains surrounding the peak, down to the bottom of valleys, were identified by the ancient Egyptians as a pyramid and el-Qurn was recognised as its pyramidion. As he writes, "The tombs were therefore hewn in and under the 'pyramid'", in which case New Kingdom mortuary temples could have been understood as the equivalent of the mortuary temples of the earlier periods,<sup>65</sup> thus rendering the man-made pyramid unnecessary.

Hatshepsut's temple at Deir el-Bahari is a part of a larger mortuary complex which was intended to emulate Old Kingdom and Middle Kingdom patterns.<sup>66</sup> It includes the tomb itself in the Valley of the Kings which can be interpreted as located within the pyramidal structure, i.e. el-Qurn. Hatshepsut's complex at Deir el-Bahari was the mortuary temple with the causeway at its front and a valley temple.<sup>67</sup> The link between Old Kingdom pyramid complexes and Hatshepsut's mortuary constructions are: 1) the Middle Kingdom mortu-

<sup>60</sup> RICHARDS 1999, 88; LEHNER 2000, 35.

<sup>61</sup> ĆWIEK in press.

<sup>62</sup> ĆWIEK in press. Adiranna Madej is currently researching this inscription as the subject of her Phd and she agrees with Ćwiek's interpretation.

<sup>63</sup> ĆWIEK in press; see also ĆWIEK 2014.

<sup>64</sup> DODSON 2000, 27–29.

<sup>65</sup> ĆWIEK in press.

<sup>66</sup> ĆWIEK in press; ĆWIEK 2014.

<sup>67</sup> ĆWIEK in press.

ary temple of Mentuhotep II at Deir el-Bahari;<sup>68</sup> and 2) two tombs in Abydos belonging to Senwosret III (Middle Kingdom) and to Ahmose (end of the Second Intermediate Period) (see below). What is interesting, in all the other cases than el-Qurn architectural additions to the natural features were oriented directly at the natural pyramids. In the case of Thebes, the solar alignment or the ritual axis of the Karnak and Deir el-Bahari temples may have been more important than the peak.

### Abydos – Pharaoh’s Mountain

This large necropolis was the royal burial ground during the Pre- and Early Dynastic Periods.<sup>69</sup> Although Abydos lost its status of a royal cemetery in the Old Kingdom,<sup>70</sup> it retained its religious significance until the end of ancient Egyptian civilisation. It became the most important cult centre of Osiris, whose head was thought to be buried there.

According to Josef Wegner,<sup>71</sup> the mortuary complex of Senwosret III at Abydos suggests that this tomb is the earliest departure from a man-made pyramid form to a hidden royal tomb that was constructed under a natural pyramid. He proposes to see in it the so-called “Amduat tomb” – a precursor to later hidden royal burials and points out that its form is a part of the development of the royal funerary architecture, which led to the selection of the Valley of the Kings as a royal burial ground.<sup>72</sup>

#### *Senwosret’s Hidden Tomb*

The tomb of Senwosret III at Abydos is located south of the Pre- and Early Dynastic royal burials and New Kingdom mortuary temples. It is situated at a location dominated by a pronounced natural peak in the cliffs. When observed from the eastern direction, it creates the visual impression of a symmetrical pyramidal-like hill.<sup>73</sup>

Josef Wegner, who discovered this phenomenon, describes its appearance as follows:

*As one approaches this corner-point of the cliffs the physical situation is such that the cliff-line extending away in both directions is hidden to view behind the mass of the prominence. Near the base of the gebel in this location there is no visual contact with the adjacent lines of cliffs. The only perceptible element becomes the symmetrical bulk formed by this distinct prominence in the cliffs. The overwhelming visual impression created is that of a free-standing, symmetrical natural pyramid.*<sup>74</sup> (Fig. 5).

The complex incorporates a structure interpreted as the valley temple near the cultivation, but the causeway is missing. Nevertheless, the track leading from the valley temple to the funerary enclosure at the foot of the mountain has been located.<sup>75</sup> The hidden entrance to the tomb is placed in the funerary enclosure (near the base of the cliff) and leads directly beneath the hill in such a way that the impression of the natural pyramidal peak has the highest visual impact by the entrance to the tomb.<sup>76</sup> The enclosure had been used for ritual activities during the final construction stage of Senwosret’s tomb. It was intentionally dismantled later, thus returning the area to the sandy, low-desert landscape which had existed prior to the inception of the tomb construction.<sup>77</sup> It is likely that Senwosret’s tomb not only was never planned to have the permanent built superstructure, but more so, its builders constructed it to be a completely concealed tomb starting at the base of the cliff of southern Abydos.<sup>78</sup>

It should be observed that this may have been a continuation of the idea visible in the funerary complex of Mentuhotep II at Deir el-Bahari, where the entrance to the underground part is also hidden on the right-hand side of the courtyard. There might also be a different interpretation (or interpretations) of the shape of this mound. It might have been evoking the mythical tomb of Osiris at Abydos which had its superstructure in the form of a mound<sup>79</sup> or/and superstructures of Early Dynastic rulers’ tombs (see DODSON and IKRAM

<sup>68</sup> See ARNOLD 1979; POLZ 2008, 530.

<sup>69</sup> See e.g. DREYER 1991.

<sup>70</sup> With exception of local Second Intermediate Period rulers, Late Period queens and the possible burial of Senwosret III, for comprehensive overview of Abydos, see O’CONNOR 2011.

<sup>71</sup> WEGNER 2009.

<sup>72</sup> SILVERMAN, SIMPSON and WEGNER 2009, Xi; WEGNER 2009, 155–160.

<sup>73</sup> WEGNER 2009, 108; for other interpretation of the cliff from different perspective see WEGNER 2007.

<sup>74</sup> WEGNER 2009, 111–113.

<sup>75</sup> WEGNER 2009, 106.

<sup>76</sup> WEGNER 2009, 133.

<sup>77</sup> WEGNER 2009, 133.

<sup>78</sup> WEGNER 2009, 1 and 134.

<sup>79</sup> See DREYER 1991; O’CONNOR 2011, 51; SMITH 2017.





Fig. 5 Natural pyramid at Abydos viewed from the east  
(WEGNER 2009, Fig. 5; colour version of the image courtesy of Josef Wegner).

2008, 134–135) or/and primordial mound (see LEHNER 1997, 35).

#### *Ahmosé – Emulation of the Middle Kingdom Idea*

Ahmosé's mortuary complex is located 1 km south of Senwosret III's ensemble. It consists of a temple and a mud brick pyramid, all located at the edge of the cultivation. At the foot of the hills, a terrace temple<sup>80</sup> was placed. The axial lines of Ahmosé's and Senwosret's constructions are identical. One can observe that other elements from Senwosret's structure have been more or less reproduced by Ahmosé. The main difference is that the complex of Ahmosé does not go below the cliff.<sup>81</sup>

One can suspect that Ahmosé knew about Senwosret's recognition of the hill as a pyramid. The fact is that he did not take advantage of the natural pyramid. Maybe because it was regarded as already "occupied" by Senwosret? Nevertheless, he constructed his true pyramid at the edge of the cultivation. Therefore, one can observe the Theban Second Intermediate Period tradition of constructing small pyramids at the foot of the cliff was implemented at Abydos where it met with Senwosret's Middle Kingdom idea of the royal tomb with hidden entrance and without the man-made pyramid.

#### **Evolution of the Idea**

The Egyptian landscape is full of rock formations of different shapes and it is sometimes a matter of

imagination to identify them as natural pyramids. Therefore, tracing natural pyramids is a difficult task because one cannot be certain how such natural features were interpreted in ancient times. Furthermore, there is no indication that the here presented natural pyramids were subject of changing or improving their shapes, to make them look more like a pyramid. If one can see that they were a focal point of cemeteries or tombs, the situation is clearer because architecture tends to structure our perceptions.

The central part of Upper Egypt, where natural pyramids are attested, does not offer a conveniently located, elevated plateau like Giza, where monumental structures could have been constructed. Furthermore, the hills of the Theban region would dwarf any pyramid constructed nearby. Instead, natural features in the region were already available and could have been conceptualised as pyramids.

The gathered evidence suggests that natural features started to be used as pyramids during the First Intermediate Period. The oldest examples are the burial complexes of Ankhtifi and other tombs in its vicinity at Moalla as well as the sepulchres at Gebelein Central Necropolis. The use of a natural pyramid by non-royals as a burial place could be interpreted as an attempt to adopt royal conventions by ambitious dignitaries to show their prestige. At this stage, the natural pyramids should be regarded as substitutes of the man-made structure. However, this usurpation of royal privileges did

<sup>80</sup> Similar in form to Hatshepsut's funerary temple at Deir el-Bahari (DODSON 2000, 24).

<sup>81</sup> WEGNER 2009, 145–154; HARVEY 2008.

not survive the reunification of Egypt and a pyramid was again restricted only for the royalty.

Senwosret III built his pyramid at Dahshur,<sup>82</sup> but he also used pyramid-shaped features at Abydos as his burial place or cenotaph. Regardless of the place of his actual burial, the utilisation of the mountain at Abydos shows that it had a symbolic value in its own right. Therefore, since the Middle Kingdom, the natural pyramids cannot be seen as substitutes for man-made structures.

The decision made by Ahmose to create a very similar complex, mirroring Senwosret's, can be explained as a way of emulating Middle Kingdom burial concepts to link his reign with that esteemed pharaoh. Furthermore, it demonstrates that Senwosret's complex was known and the idea behind it, i.e. recognition of the mountain as a pyramid (or Osiris' mound/primordial mound) was known at the end of the Second Intermediate Period and the beginning of the New Kingdom. This concept of the hidden tomb was brought back to Thebes by the rulers of the early 18<sup>th</sup> Dynasty where it flourished in the form of the rock-cut tombs in the Valley of the Kings. El-Qurn in Thebes was fully conceptualised as a pyramid, which is suggested by the use of the pyramid-shape determinative in the word referring to the peak of the Theban cliffs. At this stage of the development of the idea, utilisation of this natural feature could have had two aspects: the natural pyramid as playing the role of the man-made structure, and the evocation of religious connotations with the primordial mound and/or Osiris' mound as well.

In conclusion, mountains and rocks which were conceptualised as pyramids should be viewed as

structures with their own meaning, not as merely substitutes for man-made pyramids. They form a genre in the evolution of the burial customs of the ancient Egyptians which requires further studies. They reveal the previously overlooked aspect of the Egyptian funerary landscape that shows how ancient Egyptians projected their beliefs on the landscape and how they used the landscape to evoke status and religious symbols. Natural pyramids can also indicate how ancient Egyptians may have tried to construct the status of the deceased by using this special form of landscape as a burial place.

Since this subject has yet to be studied in depth, it opens up new possibilities for the analysis of funerary landscapes in Egypt. There might be more natural pyramids in Egypt but due to a lack of interest in the subject, such formations could have previously gone unnoticed.

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<sup>82</sup> VERNER 2004, 416–421.

## References

- ARNOLD, DI.  
1979 *The Temple of Montuhotep at Deir el-Bahari*, New York.
- 2003 *Encyclopaedia of Ancient Egyptian Architecture*, translated by S.B. Gardiner & H. Strudwick, London.
- BERGAMINI, G.  
2005 Museo Egizio – Turin (Italy): 1999 Field Activities at Gebelein, *ASAE* 79, 33–40.
- BOHANNON, J.  
2006 Mad About Pyramids, *Science Magazine*, 22 (September 2006), 1718–1720.
- COLLIER, M., MARKY, B. and SHAW, I.  
2004 Mo'alla: The Tomb of the Warlord Ankhtyfy, *Current World Archaeology* 5, 24–31.
- ĆWIEK, A.  
2014 Old and Middle Kingdom Tradition in the Temple of Hatshepsut at Deir el-Bahari, *ET* 27, 61–93.
- in press The Pyramid of the Theban Mountain, in: M. BÁRTA and J. JANAK (eds.), *Profane Landscapes, Sacred Spaces*, Sheffield.
- DARÓCZI, T.-T.  
2012 Death, Disposal and Social Memory – Towards a Definition of Funerary Landscapes, 199–207, in: W. BEBERMEIER, R. HEBENSTREIT, E. KAISER and J. KRAUSE (eds.), *Landscape Archaeology. Proceedings of the International Conference Held in Berlin, 6th – 8th June 2012*, eTopoi. Journal for Ancient Studies, Special Volume 3.
- DODSON, A.  
2000 *After the Pyramids. The Valley of the Kings and Beyond*, London.
- DODSON, A. and IKRAM, S.  
2008 *The Tomb in Ancient Egypt. Royal and Private Sepulchres from the Early Dynastic Period to the Romans*, Cairo.
- DONOHUE, V.A.  
1992 The Goddess of the Theban Mountain, *Antiquity* 66/253, 871–885.
- DREYER, G.  
1991 Zur Rekonstruktion der Oberbauten der Königsgräber der 1. Dynastie in Abydos, *MDAIK* 47, 93–104.
- EJSMOND, W.  
2016 *Gebelein: An Overview*, Warsaw.
- EJSMOND, W., CHYLA, J.M., WITKOWSKI, P., WIECZOREK, D.F., TAKÁCS, D., OZAREK-SZILKE, M. and ORDUTOWSKI, M.J.  
2015 Comprehensive Field Survey of Gebelein – Preliminary Results of a New Method in Processing Data for Archaeological Sites' Analysis, *Archaeologia Polona* 53, 617–621.
- EJSMOND, W., CHYLA, J.M., WITKOWSKI, P., TAKÁCS, D., WIECZOREK, D.F., XU-NAN, L., OETERS, V., KURONUMA T., and GRYLAK A.  
2017 Report on the archaeological survey at Gebelein in 2014, 2015 and 2016 seasons'. *PAM* 26.1, 239–268.
- EL-BAZ, FAROUK  
2001 Gifts of the Desert, *Archaeology* 54/2, 42–46.
- FIORE MAROCHETTI, E.  
2010 *The Reliefs of the Chapel of Nebhepetre Mentuhotep at Gebelein (CGT 7003/1–277)*, Culture and History of the Ancient Near East 39, Leiden and Boston.
- HARVEY, S.P.  
2008 Report on Abydos, Ahmose and Tetisheri Project, 2006–2007 Season, *ASAE* 82, 143–155.
- HELCK, W.  
1980 Königsgräbertal, cols. 514–526, in: W. HELCK, E. OTTO and W. WESTENDORF (eds.), *LÄ*, vol. III, Wiesbaden.
- INGOLD, T.  
1993 The Temporality of the Landscape, *World Archaeology* 25 (2), 152–174.
- JÁNOSI, P.  
1992 The Queens of the Old Kingdom and Their Tombs, *BACE* 3, 51–57.
- KENDALL, T. and EL-HASSAN AHMED MOHAMED  
2016 *A Visitor's Guide to The Jebel Barkal Temples*, Khartoum.
- LEHNER, M.  
1997 *The Complete Pyramids*, New York.
- LICHTHEIM, M.  
1973 *Ancient Egyptian Literature* vol. I, Berkeley.
- MANASSA, C.  
2008 El-Moalla to El-Deir, in: J. DIELEMAN W. WENDRICH and E. FROOD (eds.), *UCLA Encyclopaedia of Egyptology*, Los Angeles: escholarship, (<http://digital2.library.ucla.edu/viewitem.do?ark=21198/zz00293crv>, accessed 26 of August 2016).
- EL-MASRY, Y.  
2008 New Tombs at el-Mo'alla and the Family of Ankhtyfy, *BACE* 19, 119–138.
- O'CONNOR, D.  
2011 *Abydos. Egypt's First Pharaohs and the Cult of Osiris*, London.
- ORDUTOWSKI, M.J.  
2016 Rezultaty pomiarów magnetycznych na cmentarzyskach w Gebelein (Górny Egipt), *Medżat – Studia Egiptologiczne* 4, 33–40.
- OTTO, E.  
1975 Bergspitze (*ta dhnt*), col. 710, in: W. HELCK and E. OTTO (eds.), *LÄ*, vol. I, Wiesbaden.

PAPAZIAN, H.

- 2015 The State of Egypt in the Eighth Dynasty, 393–428, in: P. DER MANUELIAN and T. SCHNEIDER (eds.), *Towards a New History for the Egyptian Old Kingdom*, Leiden-Boston.

POLZ, D.

- 2010 New Archaeological Data from Dra' Abu el-Naga and Their Historical Implications, 343–353, in: M. MARÉE (ed.), *The Second Intermediate Period (Thirteenth – Seventeenth Dynasties). Current Research, Future Projects (Orientalia Lovaniensia Analecta 192)*, Leuven-Paris-Walpole.

REEVES, N. and WILKINSON, R.H.

- 1997 *The Complete Valley of the Kings*, London.

SMITH, M.

- 2017 *Following Osiris: Perspectives on the Osirian Afterlife from Four Millennia*, Oxford.

TILLEY, C.

- 1994 *A Phenomenology of Landscape: Places, Paths and Monuments*, Oxford.

VALBELLE, D.

- 1982 Meresger (*mr.s-gr*), cols. 79–80, in: W. HELCK, E. OTTO and W. WESTENDORF (eds.), *Lä*, vol. IV, Wiesbaden.

VANDIER, J.

- 1950 *Moalla. La Tombe d'Ankhtifi et la Tombe de Sébekhotep (Bibliothèque d'Étude 18)*, Cairo.

VAVOURANAKIS, G.

- 2007 *Funerary Landscapes East of Lasithi, Crete, in the Bronze Age*, British Archaeological Reports: International Series 1606, Oxford.

VERNER, M.

- 2004 *The Pyramids. The Mystery, Culture and Science of Egypt's Great Monuments*, Cairo – New York.

WEEKS, K.R.

- 2001 Valley of the Kings, 471–474, in: D.B. REDFORD (ed.), *The Oxford Encyclopaedia of Ancient Egypt III*, Oxford.

WEGNER, J.

- 2007 From Elephant-Mountain to Anubis-Mountain? A Theory on the Origins and Development of the Name Abdu, 459–476, in: Z. HAWASS and J. RICHARDS (eds.), *The Archaeology and Art of Ancient Egypt. Essays in Honor of David B. O'Connor*, Vol. II, Cairo.

- 2009 The Tomb of Senwosret III at Abydos, 103–169, in: D.P. SILVERMAN, W.K. SIMPSON and J. WEGNER (eds.), *Archaism and Innovation. Studies in the Culture of Middle Kingdom Egypt*, New Haven.

WILLEMS, H.

- 2010 The First Intermediate Period and the Middle Kingdom, 81–100, in: A.B. LLOYD (ed.), *A Companion to Ancient Egypt*, Oxford.